

Rock Island Arsenal
Storehouse A
(Building 131)
South Avenue between Gillespie Avenue
and Second Street
Rock Island
Rock Island County
Illinois

HAER No. IL-20-~~BB~~

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3/131-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING SURVEY

HAER
ILL.
81-ROCIL
3/131-

ROCK ISLAND ARSENAL
STOREHOUSE A
(Building 131)
HAER No. IL-20BB

Location: South Avenue Between Gillespie Avenue and
Second Street,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.704740.4598370
Quad: Davenport East

Date of Construction: 1903-1905

Present Owner and Occupant: U.S. Army

Present Use: Storage

Significance: Located immediately south of Shop A,
Storehouse A was completed in 1905 to
replace an earlier structure of the same
name that had burned two years earlier on
the same site. Based on the plans of
Chicago engineer Ralph Modjeski, who had
previously designed the Rock Island Bridge,
the new brick building preserved the
arsenal's architectural tone by
incorporating the Greek revival detailing of
its limestone predecessor. Part of the Rock
Island Arsenal National Register Historic
District, Storehouse A continues to function
as a storage facility.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: Congress appropriated funds for construction on March 3, 1903 ("Report, 1904," p. 47). The building was completed in 1905 ("Report, 1905," p. 53; Nothstein and Stephens, p. 238).
2. Architect: Ralph Modjeski (original plans in the Rock Island Arsenal Engineering Plans and Services Division; see HAER Photo Nos. IL-20BB-7 through IL-20BB-22).

Born in Cracow, Poland in 1861, Modjeski graduated with a degree in civil engineering from the Ecole des Ponts et Chaussees in Paris in 1885. That same year, he emigrated to the United States and went to work as an assistant engineer on the Union Pacific bridge in Omaha, Nebraska. Specializing in bridge work, he established his own engineering consulting practice in Chicago in 1892, and eventually gained a reputation as "one of the leading engineering authorities on bridges in this country." His first major bridge commission was the Rock Island Bridge (see HAER No. IL-20P), completed in 1896 (National Cyclopaedia, p. 68). Storehouse A is apparently the only other structure Modjeski designed at Rock Island Arsenal. He died in 1940 ("Famed Designer of Government Bridge").

3. Original and subsequent owners: U.S. Army.
4. Builder, contractor, suppliers: Not known.
5. Original plans and construction: The Rock Island Arsenal Engineering Plans and Services Division has 15 original drawings, dated August 1903, that were prepared by "Ralph Modjeski / Civil Engineer / Monadnock Bldg / Chicago" (see HAER Photo Nos. IL-20BB-7 through IL-20BB-22). The Rock Island Arsenal Historical Office has a photograph (see HAER Photo No. IL-20BB-6), dated 1906, that documents the construction specified in the following original drawings: "End Elevation" (see HAER Photo No. IL-20BB-21); "Front and Rear Elevation" (see HAER Photo No. IL-20BB-22). Except for the brick infill of various window openings and the replacement of the original, front triple doors with overhead vehicle doors, the building's present condition closely conforms to the original construction.
6. Alterations and additions: At undetermined dates, the original front doors were replaced with overhead vehicle doors and several window openings were infilled with brick.

B. Historical Context:

After taking command of Rock Island Arsenal in 1865, General Thomas Jefferson Rodman devised a master plan for installation calling for the construction of ten, stone, Greek revival, manufacturing shops, five on each side of the island's major east-west thoroughfare. To the rear of each shop, there was to be a massive stone storehouse of the same architectural style. Only two of the proposed storehouses were erected (Nothstein and Stephens, p. 178). The first, known as Storehouse A, was completed in 1885 ("Report, 1885," p. 621). After this building was destroyed by fire in February 1903, Congress appropriated funds to replace it with a new structure on the same site ("Report, 1903," p. 38).

Plans were prepared by engineer Ralph Modjeski of Chicago in the summer of 1903, and the new brick building, also called Storehouse A, was completed in 1905 for a cost of \$147,520 ("Report, 1905," p. 53.). Although the building substituted brick for the stone of the original Storehouse A, it otherwise reflected its predecessor's architectural detailing. Storehouse A has been designated as "Building 131" at least since World War II ("Industrial Facilities Inventory"). It still serves as a storage facility (for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
MacDonald and Mack Partnership
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building is a massive, rectangular-plan, brick building. It is two-and-one-half stories above a basement, with a gabled roof covering an attic. Intended to recreate the architectural character of the former late Greek Revival style building it replaced, it owes much to the predominant Colonial Revival style of the period. The imposing size and quality of the building are somewhat diminished by its location behind the ten stone shop buildings.
2. Condition of fabric: The building is well-maintained and is in good condition.

B. Description of Exterior:

1. Overall dimensions: The building measures 235' (15 bays) x 60' (3 bays) with 60' (3 bays) x 15' (1 bay) projecting pavilions cen-

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tered in the north and south elevations. The building is two-and-one-half stories tall with a full basement and attic.

2. Foundations: Unknown. It is likely that the earlier limestone foundations were reused in the reconstruction to support brick foundation walls carrying a terra cotta water table.
3. Walls: Tan brick (HAER Photo Nos. IL-20BB-1, IL-20BB-2, and IL-20BB-3) laid in stretcher bond decreasing by 6" in thickness with each story. Outside corners carry brick quoins from the water table to the cornice. The pedimented gable ends of the east and west elevations and pavilion faces are also brick with terra cotta cornices.
4. Structural systems: Structural steel columns and floor and roof beams. Columns are 20' on-center north-south and 15' on-center east-west. All exposed structural steel is covered with a fire-proof coat of plaster. Floor systems are steel joists and stringers with structural clay tile vaulting between.
5. Porches: Large porches (HAER Photo Nos. IL-20BB-2 and IL-20BB-3) are located across the pavilion ends and small porches (HAER Photo Nos. IL-20BB-1 and IL-20BB-2) are centered in the east and west ends. Each large porch has a concrete platform reached by concrete steps at their east and west ends. The outside of the porches has a pipe railing painted black. Each small porch has a concrete platform reached by concrete steps with intermediate landings at their north and south sides. They also have black pipe railings.
6. Chimneys: A round sheet metal flue (HAER Photo No. IL-20BB-1) protrudes from the upper sash of the third-floor window of the south elevation immediately west of the south pavilion. It extends horizontally to a point where it rises vertically immediately past the cornice of the roof, rising to several feet above the cornice.
7. Openings:
 - a. Doorways: Principal first-floor doorways (HAER Photo Nos. IL-20BB-1, IL-20BB-2, and IL-20BB-3) are centered in the east and west elevations and located at all three bays of the pavilion faces. Each has a flat arch lintel of terra cotta voussoirs and keystone, brick jambs, and concrete sills. The central doorways of the pavilions contain pairs of modern slab doors with upper glass panels surrounded by cream brick infill. All other pavilion doorways have had their doors removed and their openings filled with glass block and pairs of modern two-light aluminum window sash. The east and west doorways contain single modern glass doors with aluminum frames. The east and

west elevations of the pavilions at the basement level contain doorways with openings similar to those of the first-floor doorways. The south basement doorways contain modern overhead doors, but the two north doorways retain their original doors. These are double-leaf doors with each leaf having six-light fixed wood sash above a single vertical, beaded, tongue-and-groove board panel across which is a stop-chamfered, wood x-brace.

- b. Windows: All typical original window openings (HAER Photo Nos. IL-20BB-1, IL-20BB-2, and IL-20BB-3) have brick jambs, terra cotta sills and flat-arch terra cotta lintels with keystones flanked by pairs of voussoirs. The window openings of the pavilion faces and the east and west elevations are paired above and at the sides of the principal doorways, forming distinct bays on the elevations. All other window openings are single. Typical first- and second-floor sash are twelve-over-twelve, double-hung, wood, dating from the original construction. Those of the basement and attic typically are eight-over-eight, double-hung, wood, also original to the building. Many of the window openings have been filled with brick, including a majority of the second-floor window openings. Other window openings have been filled with glass block, with the net result that a minority of the window openings retain their original wood sash. Centered in each pedimented gable end (HAER Photo Nos. IL-20BB-1, IL-20BB-2, and IL-20BB-3) is an elliptical fanlight in a brick arch having a terra cotta keystone, and with a terra cotta sill. Each fanlight sash is a fifteen-light fixed type. All wood sash are painted white.

8. Roof:

- a. Shape, covering: The roof (HAER Photo Nos. IL-20BB-1 and IL-20BB-2) is a cross-gable form covered with asphalt shingles.
- b. Cornice, eaves: The projecting cornice and eaves (HAER Photo Nos. IL-20BB-1, IL-20BB-2, and IL-20BB-3) are molded terra cotta with modillions. The interior metal gutter system is tied to exterior metal leaders which lead to an underground drainage system.

C. Description of Interior:

- 1. Floor plans: The building was originally a warehouse and contained no major interior partitions. It has since undergone numerous remodelings resulting in its present total use for office, laboratory and storage functions. Most interior partitions date from the past decade. There is a freight elevator (HAER Photo No. IL-20BB-5) in the center of the building.

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- a. Basement: The basement is an open plan storage area in its center and west end with a wall dividing this area from an open office area at the east end.
 - b. First floor: The first floor is divided into various-sized rooms used as offices. Modern restrooms are located near the northwest and southeast corners.
 - c. Second floor: The second floor plan is a maze of various sizes of rooms used for offices in the center and west end and for a laboratory in the east end. Modern restrooms are located near the northwest and southeast corners.
 - d. Attic: The attic is an open plan area used entirely for storage.
2. Stairways: There are two stairways (HAER Photo No. IL-20BB-4) located in the northwest and southeast corners of the building, running from the attic to the basement. Enclosed on all sides, these are U-plan stairs with intermediate landings. Of steel construction, they have plain landings, stringers, and treads, and decorative, open risers. They have typical pipe railings painted black with knobs atop the pipe newel posts.
 3. Flooring: Basement flooring (HAER Photo No. IL-20BB-5) is poured concrete with a sealer applied to it in the storage portion and is covered with linoleum tile in the office portion. The first and second floors have wood flooring covered with linoleum tile. The attic has wood flooring with a clear varnish finish.
 4. Wall and ceiling finishes: Outer basement walls are painted brick in the office portion and unpainted brick in the storage portion. The interior columns are cased with painted plaster in the office portion and unpainted plaster in the storage portion. The office portion contains gypsum board and demountable partitions. The storage portion contains wire cage partitions. The dividing wall between the two portions is concrete block, unpainted on the storage portion face and painted on the office portion face. The ceiling is painted plaster over the tile vaulting (HAER Photo No. IL-20BB-5) in the storage portion and suspended acoustical tile in the office portion.
- Outer first- and second-floor walls are painted brick (HAER Photo No. IL-20BB-4). The columns are encased with painted plaster. Partition walls include painted plaster, painted gypsum board, painted concrete block, and demountable partitions. The ceiling is suspended acoustical tile on the first floor and painted plaster over tile vaulting on the second floor.

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The outer attic walls are painted brick. The columns are cased in painted plaster. The stair enclosure walls are painted plaster. The ceiling is painted plaster.

5. Openings:

- a. Doorways and doors: No original doorways survive. Thus, all doorways are of relatively recent vintage appropriate to their respective partitions.
- b. Windows: Window openings (HAER Photo No. IL-20BB-4) have simple brick openings without casings. The brick is finished to match the adjacent walls.

6. Hardware: Sets of three original knuckle hinges survive on each leaf of the two original basement doors. Surviving original window hardware includes sash chains, pulleys, weights, plain locks and plain lifts.

7. Mechanical equipment:

- a. Heating, air conditioning, ventilation: The building is heated by steam radiators (HAER Photo No. IL-20BB-4) from a central heating plant (Building 227).
- b. Lighting: Artificial illumination is by means of fluorescent electrical fixtures (HAER Photo No. IL-20BB-5). No evidence remains of original artificial lighting systems.
- c. Plumbing: No original plumbing fixtures survive.
- d. Elevators: The original freight elevator (HAER Photo No. IL-20BB-5) survives in the center of the building, in a modernized condition.

D. Site:

1. General setting and orientation: The building anchors the southeast corner of the intersection of South Avenue and Gillespie Avenue. Directly north, across South Avenue is Building 102, an administration building. Directly south is Building 132, a general purpose warehouse. Directly east is Building 137, a lumber shed. Across Gillespie Avenue, to the west, is a paved parking lot. The relatively level site slopes gently to the south.

Prepared by: David Arbogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

The Rock Island Arsenal Engineering Plans and Services Division has 15 original drawings prepared by Ralph Modjeski in August 1903 (see HAER Photo No. IL-20BB-7 through IL-20BB-22). The following are of special interest:

"Front and Rear Elevation," D40063, RIA B1310B1 (see HAER Photo No. IL-20BB-22).

"End Elevation and Cross Section," D400663A, RIA B131-B2.

"Doors, Windows and Brick Work Details," D40063Q, RIA B131-B9.

"Basement Plan," D40063B, RIA B13-A1.

"First Floor Plan," D40063C, RIA B131-A2.

"Second Floor Plan," D40063D, RIA B131-A3.

"Third Floor Plan."

B. Early Views:

The Rock Island Arsenal Historical Office has a photograph of the north and west facades documenting the original construction. The photograph is captioned, "567-3227 May 12, 1906 / Central Tool Storage / Storehouse 'A'" (see HAER Photo No. IL-20BB-6).

C. Bibliography:

1. Primary and unpublished sources:

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report, with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

"Industrial Facilities Inventory, Rock Island Arsenal."
Prepared by U.S. Army Corps of Engineers, Rock Island District,

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1946. Rock Island Arsenal Engineering Plans and Services Division. Lists building as "Building 131."

Real Property Cards, Rock Island Arsenal Engineering Plans and Services Division. Briefly describes building's structural characteristics and provides sketchy history of maintenance operations.

2. Secondary and published sources:

Bouilly, Robert. "Arsenal Island." Joined by a River: Quad Cities, ed. Frederick I. Anderson. N. pl.: Lee Enterprises, Incorporated, 1982. Excellent historical analysis of the arsenal's development to about 1910, written by a historian in the Rock Island Arsenal Historical Office.

"Famed Designer of Government Bridge at Rock Island Is Dead." Moline Dispatch, June 23, 1940. Modjeski's obituary.

National Cyclopaedia of American Biography, vol. 13. New York: James T. White & Company, 1916. Good biography of Modjeski.

Nothstein, Ira O. and Stephens, Clifford W. A History of Rock Island Arsenal from Earliest Times to 1954. Rock Island: U.S. Army, Rock Island Arsenal, 1965. 3 vols. Rock Island Arsenal Historical Office. The best account of the arsenal's general operations.

"Report of the Chief of Ordnance, 1885." House Documents, vol. 2374. Washington, D.C.: Government Printing Office, 1885. Gives completion date for the original Storehouse A.

"Report of the Chief of Ordnance, 1903." House Documents, vol. 4641. Washington, D.C.: Government Printing Office, 1903. Discusses burning of the original Storehouse A and the congressional appropriation for building its successor.

"Report of the Chief of Ordnance, 1904." House Documents, vol. 4790. Washington, D.C.: Government Printing Office, 1904. Describes planning of the new Storehouse A.

"Report of the Chief of Ordnance, 1905." House Documents, vol. 4950. Washington, D.C.: Government Printing Office, 1905. Notes completion of the new Storehouse A.

D. Likely Sources Not Yet Investigated:

Record Group 156 at the National Archives contains correspondence on the construction and operation of Rock Island Arsenal from 1871 to 1903. This material is also available on 216 reels of microfilm at the Browning Museum, Rock Island Arsenal.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J. Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.